



#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sunil Chada et al.

Serial No.: 10/017,472

Filed: December 7, 2001

For: METHODS OF TREATMENT INVOLVING HUMAN MDA-7

Group Art Unit: 1632

Examiner: Qian J. Li

Atty. Dkt. No.: INGN:097US

#### CERTIFICATE OF MAILING 37 C.F.R 1.8

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March 23, 2004

Date

Gina N. Shishima

#### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MS DD

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R §§ 1.97(g), (h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be

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construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed herewith. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fee from Fulbright & Jaworski Account No.: 50-1212/INGN:097US

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

Gina N. Shishima

Reg. No. 45,104

Attorney for Applicants

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Date:

March 23, 2004

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Gina N. Shishima

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Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

RE:

U.S. Patent Application No. 10/017,472 entitled "METHODS OF TREATMENT INVOLVING

HUMAN MDA-7" - Sunil Chada et al.

Our reference: INGN:097US

Sir:

Enclosed for filing in the above-referenced patent application is a Supplemental Information Disclosure Statement, Form PTO-1449, and references A25-A36, B9, and C78-C111.

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski L.L.P. Account No.: 50-1212/INGN:097US.

Please date stamp and return the enclosed postcard evidencing receipt of these materials.

Respectfully submitted,

Gina N. Shishima

Reg. No. 45,104

GNS/kmv

Encl.: as noted

Form PTO-1449 (modified)		Atty. Docket No.	Serial No.
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List of Patents and Publications for	r Applicant's	Applicant	
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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A25	2003/0066095	4/03/03	Baubet et al.	800	3	5/24/01
-	A26	6,177,074	1-23-01	Glue et al.	424	85.7	3-30-99
	A27	6,204,022	3/20/01	Johnson et al.	435	69.51	10/20/97
	A28	6,207,145	3/27/01	Tovey	424	85.4	5/09/97
	A29	6,250,469	6/26/01	Kline	206	571	11/01/00
	A30	6,326,466	12/04/01	Bottaro and Petryshyn	530	324	7/29/97
	A31	6,331,525	12/18/01	Chiou and Carlo	514	44	8/23/99
	A32	6,342,379	1/29/02	Tsien and Gonzalez	435	173.4	12/13/99
	A33	6,348,352	2-19-02	Shepard et al.	435	455	12-04-95
	A34	6,350,589	2/26/02	Morris et al.	435	41	12/31/98
	A35	6,372,218	4/16/02	Cummins	424	184.1	1/31/95
	A36	6,379,701	4/30/02	Tracy et al.	424	486	9/18/00

### **Foreign Patent Documents**

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	В9	WO 00/26368	5/11/00	PCT			

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•	C78	Co-pending U.S. Application No. 09/615,154.
	C79	Balachandran et al., "Activation of the dsRNA-dependent protein kinase, PKR, induces apoptosis through FADD-mediated death signaling," EMBO J., 17(23):6888-6902, 1998.

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	C108	Toyoshima et al., "p27, a novel inhibitor of G1 cyclin-Cdk protein kinase activity, is related to p21," Cell, 78: 67-74, 1994.
	C109	Tsuiki et al., "Mechanism of hyperploid cell formation induced by microtubule inhibiting drug in glioma cell lines," Oncogene, 20: 420-429, 2001.
	C110	Wang et al., "Interleukin 24 (MDA-7/MOB-5) signals through two heterodimeric receptors, IL-22R1/IL-20R2 and IL-20R1/IL-20R2," J Biol Chem, 277: 7341-7347, 2002.
	C111	Zamanian-Daryoush et al., "Cell cycle regulation of the double stranded RNA activated protein kinase, PKR," Oncogene, 18(2): 315-326, 1999.

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	C81	Dagon et al., "Double-stranded RNA-dependent protein kinase, PKR, down-regulates CDC2/cyclin B1 and induces apoptosis in non-transformed but not in v-mos transformed cells," Oncogene, 20(56):8045-8056, 2001.
	C82	Deb et al., "RNA-dependent protein kinase PKR is required or activation of NF-κB by IFN-γ in a STAT1-independent pathway," J. Immunol, 166:6170-6180, 2001.
	C83	Dumoutier et al., "Cutting edge: STAT activation by IL-19, IL-20 and mda-7 through IL-20 receptor complexes of two types," <i>J Immunol</i> , 167:3545-3549, 2001.
	C84	Eck and Wilson, "Gene-based therapy," Goodman & Gilman's The Pharmacological Basis of Therapeutics, McGraw-Hill, 77-101, 1996.
	C85	Ellerhorst et al., "Loss of MDA-7 expression with progression of melanoma" J Clin Oncol, 20:1069-1074, 2002.
	C86	Fickenscher et al., "The interleukin-10 family of cytokines.," Trends Immunol, 23: 89-96, 2002
	C87	Gazdar and Minna, "Targeted therapies for killing tumor cells," <i>Proc. Natl. Acad. Sci., USA</i> , 98(18):10028-10030, 2001.
	C88	Gil et al., "Induction of apoptosis by double-stranded-RNA-dependent protein kinase (PKR) involves the α subunit of eukaryotic translation initiation factor 2 and NF-κB," Molecular and Cellular Biology, 19(7):4653-4663, 1999.
	C89	Goh et al., "The protein kinase PKR is required for p38 MAPK activation and the innate immune response to bacterial endotoxin," EMBO J., 19(16):4292-4297, 2000.
	C90	Górecki, "Prospects and problems of gene therapy: an update," Expert Opin. Emerging Drugs, 6(2):187-198, 2001.
	C91	Haines et al., "Expression of PKR (p68) recognized by the monoclonal antibody TJ4C4 in human lung neoplasms," Virchows Arch. B. Cell Pathol., 62:151-158, 1992.
	C92	Huang et al., "Genomic structure, chromosomal localization and expression profile of a novel melanoma differentiation associated (mda-7) gene with cancer specific growth suppressing and apoptosis inducing properties," Oncogene, 20:7051-7063, 2001.
	C93	Jagus et al., "PKR, apoptosis and cancer," Int. J. Biochem,, 31: 123-138, 1999.

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	C94	Jiménez et al., "Signals leading to apoptosis-dependent inhibition of neovascularization by thrombospondin-1," Nat Med, 6(1):41-48, 2000.
	C95	Joki et al., "Continuous release of endostatin from microencapsulated engineered cells for tumor therapy," Nat Biotech, 19(1):35-39, 2001.
	C96	Kaye et al., "A single amino acid substitution results in a retinoblastoma protein defective in phosphorylation and oncoprotein building," Proc. Natl. Acad. Sci., USA, 87:6922-6926, 1990.
	C97	Kim et al., "Bid-induced cytochrome c release is mediated by a pathway independent of mitochondrial permeability transition pore and Bax.," J Biol Chem, 275(50):39474-39481, 2000.
	C98	Madireddi et al., "AP-1 and C/EBP transcription factors contribute to mda-7 gene promoter activity during human melanoma differentiation," J Cell Physiol, 185:36-46, 2000.
	C99	Maheshwari et al., "Differential effects of interferon gamma and alpha on in vitro model of angiogenesis," J Cell Physiol, 146:164-169, 1991.
	C100	Pataer et al., "Adenoviral Bak overexpression mediates caspase-dependent tumor killing," 60: 788-792, 2000.
	C101	Pataer et al., "Adenoviral transfer of the melanoma differentiation-associated gene 7 (mda7) induces apoptosis of lung cancer cells via up-regulation of the double-stranded RNA-dependent protein kinase (PKR)," Cancer Res, 62:2239-2243, 2002.
	C102	Peng et al., "Mitotic and G2 checkpoint control: regulation of 14-3-3 protein binding by phosphorylation of Cdc25C on serine-216," Science, 277:1501-1505, 1997.
	C103	Restifo et al., "Hierarchy, tolerance, and dominance in the antitumor T-cell response," J. Immunother., 24(3):193-194, 2001.
,	C104	Rich et al., "Cytokines: IL-20 - a new effector in skin inflammation," Curr Biol, 11:R531-534, 2001.
	C105	Saelens et al., "Translation inhibition in apoptosis: caspase-dependent PKR activation and eIF2 α phosphorylation," J. Biol. Chem., 276: 41620-41628, 2001.
	C106	Su et al., "A combinatorial approach for selectively inducing programmed cell death in human pancreatic cancer cells," Proc. Natl. Acad. Sci., USA, 98(18):10332-10337, 2001.
	C107	Tait, "HLA class I expression on human cancer cells," Human Immunology, 61:158-165, 2000.

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